

# COMMONWEALTH OF MASSACHUSETTS **EXECUTIVE OFFICE OF**

#### **ENERGY AND ENVIRONMENTAL AFFAIRS**

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Senator Michael Morrissey Senate Chair Joint Committee on Telecommunications, Utilities, and Energy State House, Room 413-D Boston, MA 02133

Representative Barry Finegold House Chair Joint Committee on Telecommunications, Utilities, and Energy State House, Room 473-B Boston, MA 02133

Dear Chairs Morrissey and Finegold:

Thank you for the Committee's thoughtful review of the proposed Renewable and Alternative Portfolio Standards (RPS & APS) regulations that were referred to your Joint Committee on Telecommunications, Utilities, and Energy (Committee) on March 19, 2009. Detailed below, I have responded to the issues raised by the Committee in the April 17 report, and I am happy to meet with you or any of the Committee's members at any time to discuss in further detail.

## I. RPS Class II Alternative Compliance Payment

In this section, the Committee comments on the amount of the alternative compliance payment (ACP) set by the Department of Energy Resources (DOER), and specifically the concern that the \$25/MWh level may not achieve the purpose of the RPS Class II portfolio, to maintain the continued operation of existing eligible renewable generating sources.

In determining the appropriate ACP value, DOER analyzed our existing supply of renewable resources, surveyed RPS programs in other states that provide standards for such vintage units and reviewed various scenarios for upgrades to these facilities. New Hampshire is the only other New England state that has a comparable program to our RPS Class II. That state also is home to most of the vintage biomass units that might be supported by our standards. NH also started its Class II ACP rate at \$25/MWh, though it has risen with the CPI (as ours will) to over \$29/MWh. It should also be noted that MA and NH qualified Class II biomass units may also be able to qualify for the Connecticut Class I program, where higher REC prices might be available. DOER concluded that the ACP rate

of \$25/MWh, increasing with the CPI, provides a fair and reasonable opportunity to participate in the RPS Class II program and maintain existing operations.

DOER is also mindful, with this and all of the portfolio standards, of the potential impacts to ratepayers, and has determined that this ACP level strikes the appropriate balance in providing a subsidy to assist these facilities in making these upgrades and participating in an RPS program for the first time here in Massachusetts, and the cost to ratepayers who are providing that subsidy.

## II. Hydroelectric Power – Use of the Low Impact Hydro Institute (LIHI)

One of the major changes to the RPS was to include hydroelectric power as an eligible technology, but the legislation clearly stipulated that only hydroelectric power that met certain size and environmental requirements:

"energy generated by new hydroelectric facilities, or incremental new energy from increased capacity or efficiency improvements at existing hydroelectric facilities; provided, however, that:

- each such new facility or increased capacity or efficiency at each such existing facility
  must meet appropriate and site-specific standards that address adequate and healthy river
  flows, water quality standards, fish passage and protection measures and mitigation and
  enhancement opportunities in the impacted watershed as determined by the department in
  consultation with relevant state and federal agencies having oversight and jurisdiction
  over hydropower facilities
- only energy from new facilities having a capacity up to 25 megawatts or attributable to improvements that incrementally increase capacity or efficiency by up to 25 megawatts at an existing hydroelectric facility shall qualify; and
- no such facility shall involve pumped storage of water or construction of any new dam or water diversion structure constructed later than January 1, 1998"

DOER's stakeholder input illuminated the fact that no two hydroelectric units are alike and that it was imperative that DOER establish standards that provide a consistent baseline across this wide range of projects to determine eligibility. DOER is committed to meet our statutory obligation by providing as clear a standard as possible to applicants so that they will know what their projects will require to receive a statement of qualification (SQ) from DOER and earn RECs.

As we researched various methodologies and processes, use of the Low Impact Hydropower Institute (LIHI) located in Portland, Maine was identified as the best approach to meet this requirement. LIHI offers certification to hydroelectric units as "low impact' based on its established criteria, which include all of the statutory named requirements. DOER staff had lengthy discussions with its Executive Director, Fred Ayer, as well as numerous conversations with hydroelectric generation unit owners, that represented a range of sizes and geographic locations, about the LIHI certification process. Almost all generator owners, including those that did not receive certification, had positive feedback about the LIHI process.

LIHI has continued to grow in its use by many other states that require certification for participation in state renewable energy programs such as RPS or to receive grants from state funds like MRET. It provides the necessary baseline that DOER is seeking for these detailed and nuanced determinations. That being said, DOER has not ceded its authority exclusively to LIHI in regard to issuance of an SQ for a specific generation unit. If an owner of a facility feels that she was denied certification by LIHI for unjust or non-applicable reasons, our regulations provide for an opportunity for the owner to make a showing to DOER as to why the SQ should still be granted. DOER ultimately retains the decision-making authority.

## III. Hydroelectric Power – Incremental Power

The addition of hydropower in the RPS included a very specific statutory requirement regarding eligibility:

"each such new facility or increased capacity or efficiency at each such existing facility must meet appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed as determined by the department in consultation with relevant state and federal agencies having oversight and jurisdiction over hydropower facilities."

DOER has read this language to mean that only those megawatt hours (MWh) of hydroelectricity that meet these site specific standards are eligible for RECs. As stated previously, DOER appreciates the difficulties in assessing hydroelectric units because of their varied nature which is why the regulations establish a clear standard for these units to be measured against in determining their eligibility, as required by the statute. The statute itself treats new and incremental output, either from capacity or efficiency improvements, the same – that both are RPS Class I eligible, and that both must meet the same site specific environmental standards.

In determining whether an efficiency improvement meets these standards, it is impossible to separate out its impact from that of the rest of the facility. The Committee suggests that it would be enough to simply assess the new impact on the watershed as a result of the improvement, but DOER does not believe that would be enough to meet the statutory requirement. The statute does not state that an improvement must merely show there has been no change but rather that the MWh flowing through the facility associated with that improvement meet the environmental standards specified. It is not possible to do so without looking at the impacts of the whole facility.

DOER appreciates that by including these standards that the Legislature was mindful that only environmentally acceptable hydropower should be deemed qualified to receive RECs for its output. In the instance where there is a facility that fails on any number of the criteria but the facility makes an efficiency improvement that has no further negative impact, but the MWh flowing through were still causing environmental harm, DOER does not believe it was the intent to allow such energy to qualify for RECs. It would be inconsistent with the statute and disrupt the balanced approach that DOER has taken in ensuring that all hydropower would have to meet the same standard in order to receive RECs.

#### IV. Landfill Methane Gas

DOER appreciates the Committee's questions regarding a change in the eligibility of landfill methane gas (LMG) under the proposed regulations. DOER has received comments from multiple stakeholders who either want to keep the requirements the same, or like the Committee would like eligibility broadened beyond the ISO-NE and adjacent control areas.

The prior RPS regulations did not permit eligibility for facilities that utilized common carrier pipelines to transfer its LMG to a generation unit for conversion to electrical energy. During the course of stakeholder process, DOER received public input that demonstrated the greater efficiency of technologies that could utilize LMG in such a fashion. Certainly if the effect is to generate more fuel from renewable sources, displacing others, support of such technology further many of the Commonwealth's energy and emissions goals.

#### V. APS Definitions

There were 3 separate definitional issues raised; (1) the definition of "gasification", (2) the definition of "commercial operation date", and (3) the definition of "incremental electrical energy."

#### Gasification

In reviewing the Committee's comments there does seem to be some ambiguity with regard to the eligibility of "petroleum when used in pet coke". To address this ambiguity, DOER has tweaked the definition to provide the clarity the Committee sought with respect to this term, by removing the phrase "excluding petroleum-derived fuel".

### Commercial Operation Date

The Committee also raises the question as to whether an existing natural gas generation unit, which would be the entity seeking APS credits, is an eligible APS Generation Unit if its commercial operation date is before January 1, 2008 as required by the regulations. Since it is the generation unit and not the facility that produces the fuel which is qualified by DOER, this is a fair point. DOER has included the following language in the definition of Commercial Operation Date to address this concern:

Commercial Operation Date. The date that a Generation Unit first produces electrical energy for sale within the ISO-NE Control Area. In the case of a Generation Unit that is connected to the End-use Customer's side of the electric meter or produces Off-grid Generation, the date that such Generation Unit first produces electrical energy. In the case of a Generation Unit that utilizes gas from a Gasification facility which meets the eligibility criteria in 16.05(1)(a)(1), or a Paper-derived Fuel which meets the eligibility criteria in 16.05(1)(a)(4), the date when the Generation Unit first utilizes such eligible gas or Paper-derived Fuel.

#### Incremental Electrical Energy

One of the concerns the Committee raises with the current definition of "incremental electrical energy" from CHP Units is the potential for creating disincentives for facilities to engage in voluntary environmental or system upgrades that might result in a net loss of electrical energy output. DOER has reviewed its regulations and specifically the process for credit calculation very carefully, mindful of the point raised.

In so doing, DOER does not believe there is an effective way to change the credit calculation to account for this issue while precluding the possibility of other generators from "gaming" the system and reducing their electrical output to gain additional credits. Additionally, the metering and calculations required under this regulation to generate credits are novel and DOER was unable to determine a way to effectively meter and monitor the changes, and relate them to the cause of the change, to ensure the accuracy needed to calculate credits. Absent these safeguards it would be unwise to open up the definition for potential misuse.

#### VI. Public Comment Procedures

In the prior RPS regulations, DOER had a provision that required a public comment period for statement of qualification applications (SQAs) that would be co-firing with an ineligible fuel. DOER included this provision because it felt that there would be an interest in these applications from many in the environmental community, among other stakeholders. At that time, the number of applications submitted did not result in any administrative delay or hardship within the application process. With the expansion of the prior RPS program to include hydroelectric power, a new RPS Class II, and the new APS, the number of applications generally is expected to increase dramatically. In addition, the number of applications that might be of interest to various stakeholders will also increase to the point where it is not administratively feasible with current staffing and other resources to require a public comment period on all such applications.

That being said, DOER is currently working on updating the RPS and APS application process by putting it online. The regulations also state that DOER may open up a public comment period for any SQA, and we certainly welcome stakeholders with an interest in a specific SQA to submit such a request.

Thank you again to you both and the other members of the Committee for your thoughtful comments on the RPS and APS regulations. DOER is confident that an active stakeholder process, numerous public comments, and continued discussions, have contributed to the development of regulations to help ensure the Commonwealth meets its goal of 20% of electricity from renewable and alternative sources by 2020, and contribute to its goals for reductions in greenhouse gas emissions and new job and business creation. DOER continues to work on a range of initiatives to maintain the Commonwealth's position as a leader in the clean energy sector, and looks forward to working with the Committee as it progresses in its work this session.

Sincerely,

PHILIP GIUDICE Commissioner